DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-023995

Address: 333 Burma Road **Date Inspected:** 18-May-2011

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Components

Summary of Items Observed:

On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

NDT

Outside Yard – OBG Trial Assembly

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 09169.

Magnetic Particle Testing (MT).

This QA inspector performed MT of approximately 15 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3013AP-001, 002, 007, 008.

SEG3013AP'-001, 002, 007, 008.

SEG3013T-079.

SEG3013U-102.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

DP3120-001-010.

DP3122-001-010.

WELDING

This QA Inspector observed the following work in progress:

Outside Yard – OBG Trial Assembly

This QA Inspector observed ZPMC qualified welding personnel identified as 067572 perform repair welding by Shielded Metal Arc Welding (SMAW), on Anchor plate to longitudinal diaphragm weld between panel point 125 and 126 of OBG Segment 14W. Weld joint is identified as SEG3020Z-006. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1, which is used as per Welding repair report B-WR20425.

This QA Inspector observed ZPMC qualified welding personnel identified as 040655 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam stiffener to longitudinal diaphragm LD3050A weld at panel point 126 of OBG Segment 14W. Weld joint is identified as SEG3020Q-107. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 067765 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam stiffener to Floor beam flange weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020AQ-009. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 066751 perform welding by Shielded Metal Arc Welding (SMAW), on Floor beam stiffener to Floor beam flange weld at panel point 127 of OBG Segment 14W. Weld joint is identified as SEG3020AP-026. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037998 perform repair welding by Shielded Metal Arc Welding (SMAW), on Edge plate I Rib stiffener to Floor beam weld at panel point 126 of OBG Segment 14W. Weld joint is identified as SEG3020AG-027. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-1G-FCM-Repair-1, which is used as per Welding repair report B-WR21007.

This QA Inspector observed ZPMC qualified welding personnel identified as 068097 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel DP3177 to Deck panel DP3183 weld of OBG Segment 14W. Weld

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

joint is identified as SEG3020-011. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037748, 068596 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel DP3169 to Deck panel DP3184 weld of OBG Segment 14W. Weld joint is identified as SEG3020-002. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 067764 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel DP3171 to Deck panel DP3172 weld of OBG Segment 14W. Weld joint is identified as SEG3020-005. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 037723 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel DP3174 to Deck panel DP3175 weld of OBG Segment 14W. Weld joint is identified as SEG3020-008. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Inspected By: Upadhye, Anand Quality Assurance Inspector **Reviewed By:** Clifford, William QA Reviewer